

A NEW GENUS OF MYMARIDAE (HYMENOPTERA: CHALCIDOIDEA) FROM THE NEW WORLD¹

MICHAEL E. SCHAUFF

Maryland Center for Systematic Entomology, Department of Entomology, University of Maryland, College Park, Maryland 20742; current address: Systematic Entomology Laboratory, IBIII, Agricultural Research Service, USDA, c/o National Museum of Natural History, Washington, D.C. 20560.

Abstract.—*Omyomymar* Schauff, new genus, is described and illustrated from material collected in North and South America. *Omyomymar silvanum* (Ogloblin), n. comb., type of the genus, is redescribed and a lectotype designated. Three additional species, (*O. grisselli*, n. sp., *O. alar*, n.sp., and *O. clavatum* (Ogloblin), n. comb.) are treated, and a key is presented.

Although the purpose of this paper is to describe a new genus, some of the included species have been the subject of previous taxonomic work. Girault (1913) described the genus *Paranaphoidea* for two species collected in Queensland, Australia. During the next 24 years he added several additional species, all from Australia (Girault, 1914, 1915, 1920, 1923, 1925a, 1925b, 1938), bringing the total to ten species plus one subspecies. In 1935 Ogloblin described two species from South America (*silvana* and *clavata*) and placed them in *Paranaphoidea*. He gave no reasons as to why he thought they were members of *Paranaphoidea*. Annecke and Doutt (1961), who had seen no specimens of *Paranaphoidea*, commented that Ogloblin was the only worker other than Girault to recognize the genus and noted that it might prove to be no more than a subgenus of *Patasson* Walker (now considered a synonym of *Anaphes* Haliday). Finally, Doutt (1973) examined the types of *Paranaphoidea* and concluded that the genus was quite distinct from *Patasson*. He also stated that Ogloblin's species were not congeneric with Girault's species of *Paranaphoidea* but did not go further. I have recently examined the types of several of Girault's species of *Paranaphoidea* (*P. egregia* (type of genus), *P. caudata*, *P. nigriclava*, *P. ponderosa*, and *P. intermedia*) and concur with Doutt's statements.

During 1979 and 1980 I collected a number of specimens from North America which I believed to be congeneric with the species described by Ogloblin as *Paranaphoidea*. After examining the types of these species, I have concluded that Ogloblin's species and the specimens I have taken represent an undescribed genus. I take this opportunity to describe the genus and differentiate it from *Paranaphoidea* and related genera.

¹ Scientific Article No. A-3269, Contribution No. 6341, of the Maryland Agricultural Experiment Station, Department of Entomology, University of Maryland.

Measurements and ratios were made on cleared and slide mounted specimens at 100 $\times$ and 160 $\times$ with a compound microscope and eyepiece reticle. All measurements are in microns unless specified otherwise. In general, terminology for morphological features is that of Debauche (1948) and Eady (1968). Funicle segments, wings, etc. were measured flat and in their longest dimension. The length of the thorax and abdomen were measured dorsally along the midline. Measurements of ovipositor length refer only to that part past the tip of the abdomen. The abbreviation LMC stands for the longest marginal cilia of the forewing and F for funicle segment (e.g., F4 is the fourth segment on the funicle). Means and standard deviations were calculated from a sample of ten individuals unless specified otherwise.

Omyomymar Schauff, NEW GENUS

Type-species.—*Paranaphoidea silvana* Ogloblin, 1935.

Female.—Head slightly wider than thorax; antenna 10-segmented, scape longitudinally striate, slightly swollen medially; club 2-segmented, basal segment with 1 sensory ridge, apical segment with 5 sensory ridges, apically and ventrally produced into a digit (Fig. 3); toruli placed in middle of face, separated by ca. 3 $\times$ their diameter; median, frontal, and supraorbital carinae unbroken; postfrontal suture present; vertex wider than long; ocelli in an equilateral triangle, width equal to $\frac{1}{3}$ POL; compound eyes well developed, with many ommatidia; facial grooves originating at ventromedial edge of toruli, converging to edges of oral cavity (Fig. 11); mandibles reduced, generally not overlapping, bidentate or weakly tridentate; scutum, anterior scutellum, lateral propodeum reticulate, postscutellum alutaceous (Fig. 12); pronotum reduced to a small band, barely visible when viewed dorsally, spiracle at posterolateral margin, sessile; prosternum as long as wide, divided medially, mesosternum with a group of small teeth between forecoxae, median lobe with single pair setae, side lobes each with single seta; notauli a thin groove, similar throughout; scutellum divided transversely into anterior and posterior sections, anterior section with paired placoid sensilla removed ca. 2 diameters from anterior edge, separated ca. 3 diameters, pair of setae posterolaterally near margin of axillae, axillae not advanced into side lobes of scutum; posterior section divided medially by a sulcus (Fig. 12); metanotum expanded medially, not projecting over propodeum; propodeum divided by a longitudinal suture, single seta placed posterior to each spiracle; phragma reaching to hindcoxae or slightly beyond; forewing (Fig. 5) with LMC greater than wing width, hypochaeta near proximal macrochaeta, submarginal vein ca. 6–8 $\times$ as long as wide; marginal vein (Fig. 10) about as long as wide, radial vein about 2 $\times$ as long as wide, proximal and distal sensillae separated, membrane with 2 longitudinal lines of setae on basal $\frac{1}{2}$ past venation, setae scattered over apical $\frac{1}{2}$; hindwing about as long as forewing, membrane parallel sided, with few discal setae; tarsi 4-segmented, subequal, hindcoxae with a group of small teeth on inner surface, foretibia with few scattered sensilla basiconica; foretibial spur bifurcate; abdomen broadly attached to thorax, anterior $\frac{1}{3}$ to $\frac{1}{2}$ lightly sclerotized, becoming darker posteriorly, posterodorsal surface imbricate with some imbrications produced as small denticles; spiracle absent; cerci semicircular, each with 4 setae; ovipositor originating in anterior $\frac{1}{3}$ of gaster, exerted posteriorly beyond apex.

Male.—Generally similar to the female except the following: antenna 13-segmented, scape with few to many conical sensilla basiconica (Fig. 7), all funicles

with sensory ridges, terminal segment arising directly from segment 12, intersegmental membrane absent (Fig. 8); mandibles well developed, tridentate, overlapping; pronotum visible dorsally, about $\frac{1}{3}$ as long as wide, spiracular opening enlarged, elliptic; genitalia as in Fig. 9.

Diagnosis.—Tarsi 4-segmented, female antenna 10-segmented, funicle 6-segmented, club 2-segmented, the apical segment produced into a digit (as Fig. 3); male scape with several conical sensilla basiconica (Fig. 7); posterior scutellum divided medially by a longitudinal sulcus (Fig. 12); propodeum divided medially, phragma projecting to hindcoxae or beyond; gaster broadly attached to thorax, lightly sclerotized anteriorly, darkening posteriorly; ovipositor exerted past tip of abdomen.

Species of *Omyomymar* are most easily confused with, and most closely related to, members of *Anagrus* and *Stethynium*. These genera also have the gaster broadly attached to the thorax and the posterior scutellum divided by a longitudinal sulcus as in *Omyomymar*. However, in *Anagrus* and *Stethynium* the female mandibles are well developed and overlapping (small and not overlapping in *Omyomymar*) and the ovipositor is rarely exerted past the tip of the abdomen (always exerted in *Omyomymar*). *Anagrus* also differs in having a single-segmented antennal club with no apical digit, the axillae are thrust forward into the side lobes of the scutum (axillae end on line with posterior edge of scutum in *Omyomymar*), and the hypochaeta arises at the base of the submarginal vein, anterior of the macrochaetae (hypochaeta between proximal and distal macrochaetae in *Omyomymar*). In addition, males of *Anagrus* lack the conical sensillae on the scape found in *Omyomymar*.

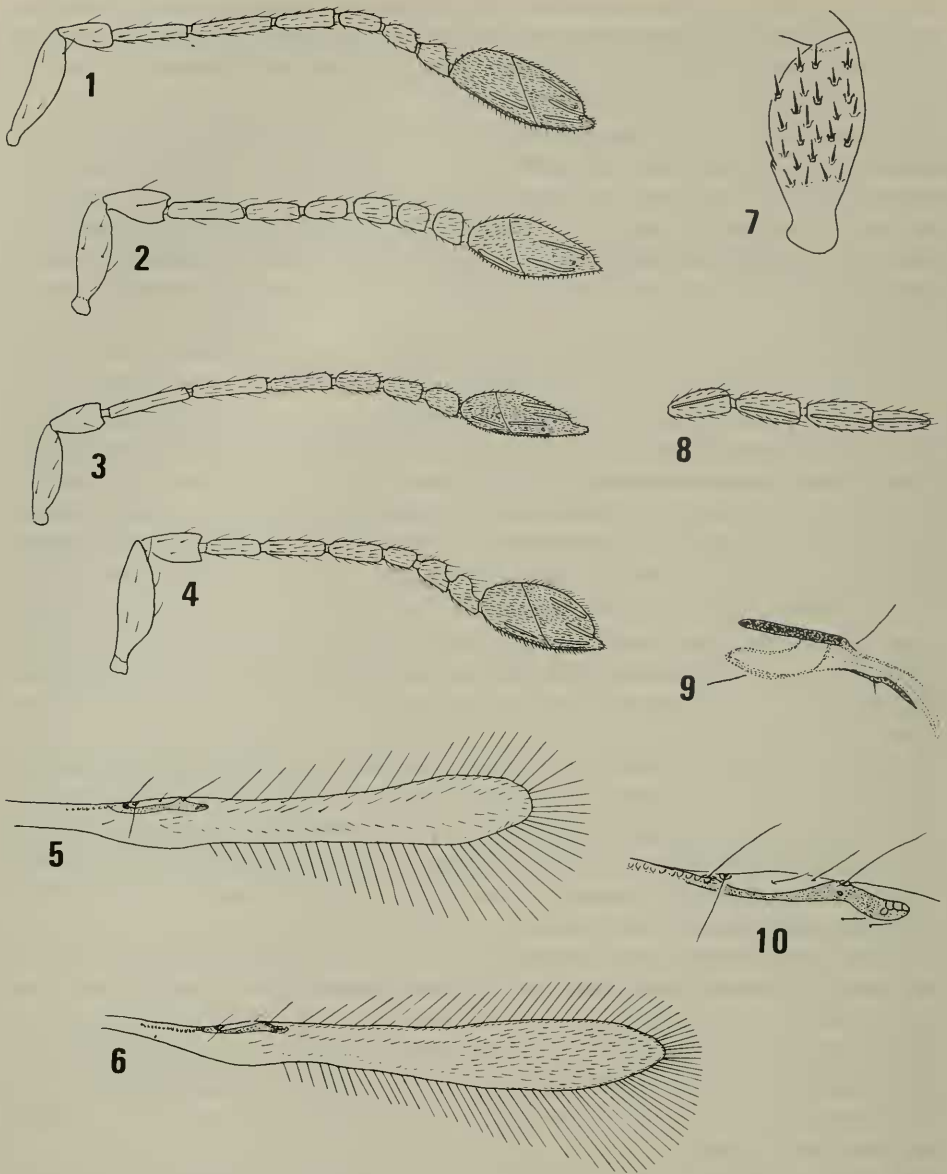
Females of *Stethynium* have a 3-segmented club with no apical digit and the forewings are only 2–3× as long as wide (forewings at least 5× as long as wide in *Omyomymar*). As in *Anagrus*, males of *Stethynium* lack the conical sensillae on the scape. Both sexes of *Anagrus* and *Stethynium* have the dorsal thorax covered by light alutaceous or occasionally coriaceous sculpturing (dorsal thorax reticulate, except for postscutellum, in *Omyomymar* (Fig. 12)).

Most of the available specimens of *Paranaphoidea* are very poorly preserved. Nevertheless, several differences are apparent between species of this genus and *Omyomymar*. *Paranaphoidea* differs in having the tip of the forewing truncate (wing tip rounded in *Omyomymar*), LMC less than wing width (greater than wing width in *Omyomymar*), the hindwing broadening past the venation (hindwing parallel-sided in *Omyomymar*), and the tip of the female antennal club rounded (produced into a digit in *Omyomymar*).

Etymology.—*Omyomymar* from Greek mymar to blame or ridicule, gender neuter. The prefix omyo is an euphonious arbitrary combination of letters.

KEY TO FEMALES OF *OMYOMYMAR*

1. F6 wider than long (Fig. 2), F5 quadrate; ovipositor exerted just beyond tip of abdomen; apical club digit wider than long; apical $\frac{1}{2}$ of forewing with few scattered setae (Fig. 5) *alar*, new species
- F6 longer than wide (Fig. 3), F5 longer than wide; ovipositor exerted at least $\frac{1}{2}$ length of abdomen; apical club digit equal to, or longer than, wide; apical $\frac{1}{2}$ of forewing with many evenly scattered setae (Fig. 6) 2
2. Dorsal margin of F6 excised (Fig. 4); club only about 2× as long as wide, apical digit as long as wide 3



Figs. 1-10. 1-4, Female antennae. 1, *O. grisselli*. 2, *O. alar*. 3, *O. silvanum*. 4, *O. clavatum*. 5, 6, Forewings. 5, *O. alar*. 6, *O. grisselli*. 7-10, *Omyomymar* spp. 7, Male scape (lateral view). 8, Male antenna (lateral view). 9, Male genitalia (lateral view). 10, Forewing venation.

- Dorsal margin of F6 straight (Fig. 3); club 3× as long as wide, apical digit 2× as long as wide *silvanum* (Ogloblin)
- 3. Fl 4× as long as wide (Fig. 4); ovipositor exerted less than length of abdomen; body length about 0.7 mm *clavatum* (Ogloblin)
- Fl 6× as long as wide (Fig. 1); ovipositor exerted length of abdomen or more; body length 1.0-1.1 mm *grisselli*, new species

Omyomymar silvanum (Ogloblin), NEW COMBINATION

Fig. 3

Paranaphoidea silvana Ogloblin, 1935: 149.

Lectotype female. — Length excluding ovipositor 0.76 mm (0.71 ± 0.07). Head, funicle segments, club, thorax, distal $\frac{2}{3}$ of abdomen except tip light brown; scape, pedicle, legs, basal $\frac{1}{3}$ and tip of abdomen light yellow; compound eyes and area adjacent to ocelli red; frons alutaceous, vertex imbricate, genae and area laterad of foramen strigulate, imbricate near postfrontal suture; POL 46, OOL 15; antennal ratio beginning with scape 83:43:65:55:49:37:34:31:108 (club width 31), dorsal margin of funicle segments straight, basal segment of club slightly smaller than apical segment, apical digit about $2\times$ as long as wide (Fig. 3); thorax length 264 (240 ± 9), alutaceous ventrally, phragma rounded posteriorly, indented medially, reaching just past hindcoxal foramen; propodeal spiracle set in a shallow depression, seta removed ca. $1\times$ own length; forewing length 681 (615 ± 27), width 82 (82 ± 4), LMC 139 (143 ± 6), setae evenly scattered over apical $\frac{1}{2}$ of membrane; hindwing length 624 (581 ± 23); forecoxa alutaceous, mid- and hindcoxae smooth or faintly striate; ratio femur:tibia:tarsus as follows: foreleg 107:138:178; midleg 122:221:178; hindleg 138:291:190; abdomen ovate elliptic, length 384 (384 ± 39); ovipositor exerted 264 (180 ± 34).

Types. — **Lectotype** ♀, by present designation, on slide with data: Loreto Mision, 10-iii-1933, A. Ogloblin. Paralectotypes: 2 ♀, Loreto Misiones 18-ix-1933 and 8-x-1933, A. Ogloblin; 1 ♀ Puerto Aquirre Misiones, 19-iv-1933, A. Ogloblin. Deposited in Facultad de Ciencias Naturales y Museo, Universidad Nacional de La Plata, La Plata, Argentina.

Other specimens examined. — 1 ♀, Venezuela, Lara, Parque Nac Yacumba, 7-iv-1981, E. E. Grissell. 14 ♀, 3 ♂, Maryland, Prince Georges Co., Laurel, Patuxent Wildlife Research Center, June 1979 and June–Sept. 1980, M. E. Schauff, Malaise Trap. 3 ♀ and 1 ♂, Maryland, Prince Georges Co., Beltsville, Beltsville Agric. Res. Center, June 1980, K. Thorpe, Malaise Trap (all in USNM). 1 ♀, Ontario, Canada, 16-7-1975. E. Sigler (CNC).

Variation. — Quantitative estimates of variation are given in the species description. The phragma may end just beyond the hindcoxal insertion or extend slightly farther back so that it pushes against the dorsal abdominal surface giving the impression that it projects slightly into the abdominal cavity. Scrobal depressions are quite evident in some specimens but not in others. It is unclear at this time if the apparent lack of scrobes in some specimens is due to changes that occur during mounting or if they are truly lacking. A single male collected at Beltsville has only 4 conical sensilla on the surface of the scape (other males have ca. 30 sensilla on each scape).

Discussion. — This species may be distinguished from other species by the following: Dorsal margin of F5 and 6 straight (margin excised in *clavatum* and *grisselli*); club $3\times$ as long as wide ($2\times$ as long as wide in *clavatum* and *grisselli*); F6 longer than wide (wider than long in *alar*); and ovipositor exerted at least half the length of the abdomen (ovipositor exerted just past tip in *alar*).

Ogloblin described *silvanum* from four specimens and failed to designate a holotype. Therefore I have designated the most complete and best preserved specimen of the series as the lectotype.

Omyomymar grisselli Schauff, NEW SPECIES

Figs. 1, 6

Holotype female.—Length excluding ovipositor 1.10 mm. Head, funicle segments, club, thorax, distal $\frac{2}{3}$ abdomen except tip dark brown; scape, pedicle light brown; legs, basal $\frac{1}{2}$ abdomen light brown to yellow; tip of abdomen white; frons alutaceous above toruli, sculpturing becoming lighter below toruli and lateral of facial grooves, fading to smooth between facial grooves, vertex imbricate, genae and area laterad of foramen strigulate; POL 55, OOL 15; scrobes indicated only by a slight groove; antennal ratio beginning with scape 113:55:80:83:61:43:43:43:140 (club width 63); F5 and 6 excised dorsally (Fig. 1), club segments subequal, digit longer than wide; thorax length 310, sculpture fading from reticulate to smooth over median propodeum, lightly alutaceous ventrally; phragma indented medially, reaching beyond hindcoxae; propodeal spiracle set in shallow depression, seta removed ca. $3\times$ own length; forewing (Fig. 6) length:width:LMC 912:110:168, setae evenly scattered over apical $\frac{1}{2}$ of membrane; hindwing length 840; fore- and midcoxae alutaceous, hindcoxa reticulate basally; ratio femur:tibia: tarsus as follows: foreleg 153:187:216; midleg 168:288:240; hindleg 182:408:264; abdomen elongate elliptic, length 576, ovipositor exerted 576.

Allotype.—Similar to female except for following: length 0.90 mm; antennal ratio beginning with scape 77:46:55:61:58:49:46:46:46:43:46:46:43.

Types.—Holotype ♀; on slide with data: Maryland, Prince Georges Co., Laurel, Patuxent Wildlife Research Center, 29 Aug.–8 Sept. 1980. M. Schauff, Malaise trap in old field. Deposited in the National Museum of Natural History, type no. 100573. Allotype ♂, same data as above except collected 10–18 July. Paratype ♀ on slide with data: Michigan, E. Lansing, 20-ix-1965. B. D. Burks. Allotype and paratype deposited in USNM.

Variation.—Very little variation was observed in the specimens available for study. The female paratype is slightly smaller (1.0 mm) and more uniformly brown colored with the base of the abdomen remaining light brown and becoming almost black posteriorly. The median indentation of the phragma is less pronounced in the male than in the females.

Discussion.—Specimens of *grisselli* are most easily confused with *clavatum* which shares the excised dorsal margin of F6 (Fig. 4) (*silvanum* and *alar* have the dorsal margin of F6 straight (Figs. 2, 3)). Specimens of *clavatum* differ in having F1 $4\times$ as long as wide ($6\times$ as long as wide in *grisselli*), and the ovipositor exerted less than the length of the abdomen (exserted the length of the abdomen or more in *grisselli*).

Etymology.—This species is named in honor of Dr. E. E. Grissell.

Omyomymar alar Schauff, NEW SPECIES

Figs. 2, 5

Holotype female.—Length excluding ovipositor 0.59 mm (0.55 ± 0.047). Head, funicle segments, club, thorax, distal $\frac{1}{2}$ of abdomen except tip light brown; scape, pedicel, legs, basal $\frac{1}{2}$ of abdomen light yellow; frons lightly alutaceous, vertex imbricate, genae and area around foramen imbricate; POL 38, OOL 13; antennal ratio beginning with scape 77:46:52:38:31:28:25:25:92 (club width 37), dorsal margin of all funicles straight, basal segment of club ca. $\frac{1}{2}$ size of apical segment,

apical digit wider than long (Fig. 2); thorax length 230 (221 ± 21.9); phragma rounded posteriorly, not indented medially, reaching just beyond hindcoxae; propodeal spiracle flush with surface, seta removed ca. $1.5\times$ own length; forewing (Fig. 5) length 470 (477 ± 15); width 62 (60 ± 2); LMC 99 (102 ± 3), apical $\frac{1}{2}$ of wing with bare spots medially; hindwing length 450 (449 ± 17); coxa alutaceous, ratio femur:tibia:tarsus as follows: foreleg 96:114:129, midleg 95:163:123, hindleg 98:187:138; abdomen ovate elliptic, length 291 (274 ± 33); ovipositor exerted 71 (71 ± 12).

Allotype.—Similar to female except the following: length 0.61 mm; antennal ratio beginning with scape 50:34:35:28:30:26:28:27:27:26:30:27.

Types.—Holotype ♀ on slide with data: Maryland, Prince Georges Co., Laurel, Patuxent Wildlife Research Center, 25 July–6 Aug. 1980. M. Schauff, Malaise trap in old field. Deposited in the National Museum of Natural History, type no. 100574. Allotype and paratypes as follows: 2 ♂ and 6 ♀ same data as holotype; 3 ♂ and 3 ♀ same data except collected 6–15 Aug.; 1 ♂ and 1 ♀ collected 29 Aug.–8 Sept. Allotype in USNM, paratypes deposited in the USNM and British Museum (Natural History).

Variation.—Quantitative estimates of variation are given in the species description. The posterior scutellar sulcus occasionally fades anteriorly and was very faint in one specimen. There is minor variation in the setal pattern of the forewing with a few setae occasionally found in the region between the two lines. In some specimens, the phragma appears to penetrate the abdominal cavity, while in others, the phragma-propodeum complex seems to push back the anterior margin of the abdomen. Scrobal depressions are evident in some specimens, but are apparently lacking in others. One male specimen had the first and second funicle of one antenna partially fused, and the coxal teeth were absent. Another male had a reduced number of conical sensillae on the scape (12 instead of the average of about 30).

Discussion.—This species may be distinguished by the following: F5 quadrate, 6 wider than long (5 and 6 longer than wide in other species); ovipositor exerted just past tip of abdomen (ovipositor exerted at least half length of abdomen in other species); and club digit reduced and wider than long (digit longer than wide in other species).

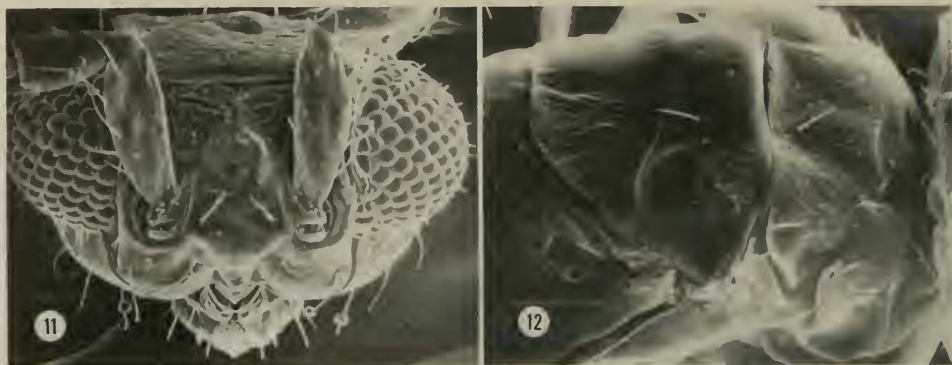
Etymology.—The species epithet is an euphonious arbitrary combination of letters.

Omyomymar clavatum (Ogloblin), NEW COMBINATION

Fig. 4

Paranaphoidea clavata Ogloblin, 1935: 152.

Holotype female.—Length excluding ovipositor 0.67 mm. Head, funicle segments, club, thorax, distal $\frac{1}{2}$ of abdomen except tip light brown; scape, pedicel, legs, basal $\frac{1}{2}$ of abdomen yellow; compound eyes and area adjacent to each ocellus red; vertex imbricate; antennal ratio beginning with scape 61:49:58:58:49:34:31:31:135 (club width 59); dorsal margin of funicles 5 and 6 excised (Fig. 4), club segments subequal, apical digit longer than wide; thorax length 276, phragma rounded posteriorly, indented medially, reaching past hindcoxae, propodeal spiracle flush with surface, seta removed ca. $3\times$ own length; forewing length 734,



Figs. 11, 12. Scanning electron micrographs of *Omyomymar* spp. 11, Head (facial view). 12, Thorax (dorsal view).

width 86, setae evenly scattered over distal $\frac{1}{3}$ of membrane; hindwing length 638; ratio femur:tibia:tarsus as follows: foreleg—:129:168; midleg—:236:184; hindleg—:288:199; abdomen elongate elliptic, length 360; ovipositor exerted 322.

Types.—Holotype ♀ on slide with data: Loreto, Misiones, 4-x-1933. A. Ogloblin. Deposited in Facultad de Ciencias Naturales y Museo, Universidad Nacional de La Plata, La Plata, Argentina.

Other specimens examined.—2 ♀, 1 ♂, Porto Lavaca, Texas, iv-7-1938, H. J. Crawford, on Compositae (USNM). 7 ♀, Trinidad, Curepe, St. Mary Rd., 10-24-iii-1974, F. D. Bennett, yellow pan trap (CNC).

Discussion.—This species can be distinguished by the following: F5 and 6 with dorsal margin excised (dorsal margin straight in *alar* and *silvanum*); F1 4× as long as wide (F1 6× as long as wide in *grisselli*); ovipositor exerted less than length of abdomen (exserted length of abdomen or more in *grisselli*).

This species was described from a single female which is mounted on a slide in balsam. This specimen is poorly cleared and one forewing and parts of some of the legs are missing. None of the femora were positioned so that they could be measured. Most of the remaining marginal cilia are broken or missing and the head is partially collapsed. As a result, the description given above is incomplete.

ACKNOWLEDGMENTS

I am indebted to Luis DeSantis (Facultad de Ciencias Naturales y Museo, Universidad Nacional de La Plata, La Plata, Argentina) for the loan of the Ogloblin type material and E. C. Dahms (Queensland Museum, Gregory Terrace, Fortitude Valley, Brisbane, Australia) for allowing me to examine the types of *Paranaphoidea*. I also thank C. Yoshimoto (Canadian Forestry Service, Department of the Environment, Ottawa, Ontario) for the loan of specimens from the Canadian National Collection (CNC), and especially E. E. Grissell (Systematic Entomology Lab, USDA, % U.S. National Museum NHB 168, Washington, D.C. 20560) for allowing me to work with the Smithsonian collection (USNM).

LITERATURE CITED

- Annecke, D. P. and R. L. Doutt. 1961. The genera of the Mymaridae, Hymenoptera: Chalcidoidea. South Afr. Dep. Agric. Tech. Serv., Entomol. Mem. 5: 1-71.

- Debauche, H. R. 1948. Étude sur les Mymarommidae et les Mymaridae de la Belgique (Hymenoptera: Chalcidoidea). Mém. Mus. Hist. Nat. Belg. 108: 1-248.
- Doutt, R. L. 1973. The genus *Paranaphoidea* Girault (Hymenoptera: Mymaridae). Pan-Pac. Entomol. 49: 185-187.
- Eady, R. D. 1968. Some illustrations of microsculpture in the Hymenoptera. Proc. R. Entomol. Soc. Lond. (A) 43: 66-72.
- Girault, A. A. 1913. Australian Hymenoptera Chalcidoidea II. Supplement-Mymaridae. Mem. Queensl. Mus. 2: 107-129.
- . 1914. Descriptions of new chalcid-flies. Proc. Entomol. Soc. Wash. 16: 109-119.
- . 1915. Australian Hymenoptera Chalcidoidea—II. Second Suppl. Mem. Queensl. Mus. 3: 154-169.
- . 1920. New genera and species of Australian Mymaridae. Insec. Inscit. Menstr. 8: 96-100.
- . 1923. Loves wooed and won in Australia. Privately Published. Brisbane. 3 pp.
- . 1925a. Notes and descriptions of Australian chalcid-flies—III (Hymenoptera). Insec. Inscit. Menstr. 13: 91-100.
- . 1925b. Some gem-like or marvellous inhabitants of the woodlands. Privately Published. Brisbane. 3 pp.
- . 1938. New Trichogrammatidae and Mymaridae from Australia (Hym.). Rev. Entomol. (Rio de J.) 9: 382-396.
- Ogloblin, A. A. 1935. Dos especies nuevas del genero *Paranaphoidea* Gir. (Hym. Mymaridae). Rev. Entomol. (Rio de J.) 5: 149-153.